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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,269	07/26/2006	Heike Becker	294001US0PCT	8383
22850 7590 04/18/2008 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER NGUYEN, THUY-AI N				
ART UNIT 1796		PAPER NUMBER		
NOTIFICATION DATE 04/18/2008		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/587,269

**Applicant(s)**

BECKER ET AL.

**Examiner**

THUY-AI N. NGUYEN

**Art Unit**

1796

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 and 6-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

Applicant's response filed on 01/10/2008 has been fully considered. Claim 5 is canceled. New claim 14 has been added. Claims 1, 4, 6- 9, 11- 13 are amended. Claims 1-4, and 6- 14 are pending.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9- 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Scherr et al. (US. 5,641,855).

Regarding claims 9 and 10, Scherr et al. teach a process for preparation of water soluble or water dispersible compound comprising:

i) crosslinking of polyalkylenepolyamines, polyamidoamines grafted with ethyleneimine, polyether- amines, and the mixtures thereof, with

- bifunctional crosslinkers having a halo- hydrin, glycidyl, aziridine, or isocyanate unit, and

- monoethylenically unsaturated carboxylic acids, salts, esters, amides, or nitrile of monoethylenically unsaturated carboxylic acid, or the mixtures thereof (abstract).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1- 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Littig et al. (US. 6,573,228) in view of Scherr et al. (US. 5,641,855).

Regarding claim 1, Littig et al. teach a composition comprising polyalkyleneamines (PA unit, (col. 3: 30- col. 4: 55), which is grafted with ethyleneimine (col. 5: 13- 65), wherein polyalkyleneamines crosslink with carboxylic acids including maleic acid (col. 6: 5- 46), and further crosslink with epihalohydrin (col. 6: 47- 67). Littig et al. further teach the composition further comprising surfactants (col. 10: 52- col. 13: 52), water soluble organic solvent such as polyethylene glycol (PEG, col. 17: 22- 28), polyols (col. 6: 58- 67), alkanolamine (alkanolammonium salt, col. 14: 15- 27), carboxylic acid (col. 16: 27- 54), builder, additives (col. 13: 55- col. 15: 57), and water (col. 18: 5-10).

Littig et al. do not teach the composition, wherein the monoethylenically unsaturated carboxylic acids are acrylic acid, methacrylic acid, or ethylacrylic acid. Scherr et al. teach the water soluble condensation products as described by the

Art Unit: 1796

applicant (abstract), wherein the monoethylenically unsaturated carboxylic acids are acrylic acid, methacrylic acid, ethylacrylic acid, and maleic acid. Scherr et al. shows the alternative equivalence between maleic acid, acrylic acid, methacrylic acid and ethylacrylic acid. At the time of the invention, it would have been obvious to one of ordinary skill in the art to substitute acrylic acid, methacrylic acid and ethylacrylic acid for maleic acid in the teaching of Littig et al. for the same purpose of using maleic acid for grafting the polyalkyleneamines.

Regarding claim 2, Littig et al. teach the composition, wherein:

a) the fabric enhancement system (or component A) is present in an amount of from 0.01 to 20 percent (col. 2: 33- 46),

b) surfactants (or component B) is from 0.01 to 60 percent by weight of the composition (col. 10: 53- 65),

c) ethanol, propanediol (or component C) is present in an amount of from 3.36 percent by weight of the composition (col. 19, table 1),

d) and f) alkanolammonium salts (component D) and builder (component F) are present in amount of from 1 to 50 percent by weight of the composition (col. 14: 5- 14),

e) carboxylic acid (or component E, col. 16: 27- 54),

g) additives (col. 13: 55- 64), and

h) water (col. 18: 10- 11).

Regarding claim 3, Littig et al. teach the composition, wherein component Aa is a polyalkyleneamine (col. 3: 38- 65).

Regarding claim 4, Littig et al. teach the composition, wherein the component Ab is epihalohydrins (col. 6: 48- 67).

Regarding claim 6, Littig et al. teach the composition, wherein component B is fatty alcohol sulfate, alkyl ether sulfates, and fatty alcohol alkoxylates (col. 11: 1- col. 12: 66).

Regarding claim 7, Littig et al. teach the composition, wherein the component C is ethanol, propanediol (table 1, col. 19).

Regarding claim 8, Littig et al. teach the composition comprising monoethanolamine (table 1, col. 19), and component E including acetic acid (col. 9: 45- 55).

Claims 11, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Littig et al. (US. 6,573,228) and Scherr et al. (US. 5,641,855) as applied to claim 1 above, and further in view of Boeckh et al. (US. 2003/0195135).

Regarding claims 11,13 and 14, Littig et al. teach a detergent composition comprising the compound as described above and the method of using the composition of that compound on fabric (col. 18: 51- col. 19- 25), wherein the method comprising the step of contacting the fabric with the detergent composition of the said compound. Littig et al. do not teach using the composition on a hard surface. Boeckh et al. teach the cleaning composition for treating the hard surfaces including glass and floor [0104], wherein the composition comprises water soluble polyamidoamines grafted with ethyleneimine, epichlorohydrin [0071- 0072], and water soluble polyethyleneimine

crosslinked with epichlorohydrin and monocarboxylic [0069]. Littig et al. and Boeckh et al. are analogous art because they are in the same field of endeavor, namely, a cleaning composition comprising the similar compound which is used as soil release agent.. At the time of the invention, it would have been obvious to one of ordinary skill in the art to use composition of in the teaching of Littig et al. on the surface in order to bring out variety benefit of the composition.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Littig et al. (US. 6,573,228) in view of Scherr et al. (US. 5,641,855) and Boeckh et al. (US. 2003/0195135).

Regarding claim 12, Littig et al. teach a detergent composition comprising the compound as described above and the method of using the composition of that compound on fabric (col. 18: 51- col. 19- 25), wherein the method comprising the step of contacting the fabric with the detergent composition of the said compound. Littig et al. do not teach using the composition on a hard surface. Boeckh et al. teach the cleaning composition for treating the hard surface, wherein the composition comprises water soluble polyamidoamines grafted with ethyleneimine, epichlorohydrin [0071- 0072], and water soluble polyethyleneimine crosslinked with epichlorohydrin and monocarboxylic [0069]. Littig et al. and Boeckh et al. are analogous art because they are in the same field of endeavor, namely, a cleaning composition comprising the similar compound which is used as soil release agent.. At the time of the invention, it would have been obvious to one of ordinary skill in the art to use composition of in the

teaching of Littig et al. on the surface in order to bring out variety benefit of the composition.

Littig et al. do not teach the composition, wherein the monoethylenically unsaturated carboxylic acids are acrylic acid, methacrylic acid, or ethylacrylic acid. Scherr et al. teach the water soluble condensation products as described by the applicant (abstract), wherein the monoethylenically unsaturated carboxylic acids are acrylic acid, methacrylic acid, ethylacrylic acid, and maleic acid. Scherr et al. shows the alternative equivalence between maleic acid, acrylic acid, methacrylic acid and ethylacrylic acid. At the time of the invention, it would have been obvious to one of ordinary skill in the art to substitute acrylic acid, methacrylic acid and ethylacrylic acid for maleic acid in the teaching of Littig et al. for the same purpose of using maleic acid for grafting the polyalkyleneamines.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1 through 8, and 9 through 10 have been considered but are moot in view of the new ground(s) of rejection.

According to the argument of claim 12, Boeckh et al. state that the hydrophobic polymer is not the cationic polymer. It is formed or obtained by coating the surface of the anionically dispersed, particulate, hydrophobic polymer with the cationic polymers [0047]. The cationic polymer including polyethyleneimines, crosslinked polyamidoamines grafted with ethyleneimine are water soluble [0069- 0072]. It is clear that the cleaning compositions of Boeckh et al. and Littig et al. comprises similar



compound that have the same backbone of polyamidoamine. Thus, it would be obvious to use the composition of Littig et al. for the surface cleaning as in the teaching of Boeckh et al.

According to the argument of claims 11 and 13, although Littig et al. and Boeckh et al. have different intended use, they both teach about cleaning composition comprising similar compound that have the same backbone structure as mentioned above. It would be obvious that one of ordinary skill in the art to use the composition in the same field of cleaning and similar compound as mentioned to share the method of cleaning in the purpose to bring out variety benefit of the composition.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THUY-AI N. NGUYEN whose telephone number is (571)270-3294. The examiner can normally be reached on Monday-Friday: 8:30 a.m. - 5:00 p.m. eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

April 9, 2008

Patent Examiner  
Thuy- Ai N. Nguyen

/Mark Eashoo/  
Supervisory Patent Examiner, Art Unit 1796  
13-Apr-08